

Chapter 524: Criteria and Standards for Waste Discharge Licenses

SUMMARY: This rule contains criteria and standards for waste discharge licenses (or "permits") issued by the Department. These include implementation of technology-based treatment requirements for all discharges. Also included are criteria for consideration of aquaculture projects, fundamentally different factors, and certain variances and best management practices. The content of this rule is largely taken from federal regulations, and most references and terms are in the context of the Code of Federal Regulations. To aid the reader, a citation to the appropriate federal regulation is shown in each section of this rule.

Section 1. References to Federal Regulations and definitions. Portions of this rule refer to federal regulations of the United States Environmental Protection Agency (EPA). Unless otherwise specified, the federal regulations referenced are those regulations effective as of July 1, 1998, as they appear in volume 40 of the Code of Federal Regulations (CFR). Definitions for terms used in this rule may be found Chapter 520.

Section 2. Criteria and Standards for Imposing Technology-Based Treatment Requirements Under Sections 301(b) and 402 of the Act. [see 40 CFR 125, subpart A]

Subsection I. Purpose and Scope. This section establishes criteria and standards for the imposition of technology-based treatment requirements in permits under section 301(b) of the Act, including the application of EPA promulgated effluent limitations and case-by-case determinations of effluent limitations under section 402(a)(1) of the Act.

Subsection II. Technology-based treatment requirements in permits.

(a) **General.** Technology-based treatment requirements under section 301(b) of the Act represent the minimum level of control that must be imposed in a permit issued under section 402 of the Act. (See Chapter 523 for a discussion of additional or more stringent effluent limitations and conditions.) Permits shall contain the following technology-based treatment requirements in accordance with the following statutory deadlines;

(1) For POTW's, effluent limitations based upon:

- (i) Secondary treatment--from date of permit issuance; and
- (ii) The best practicable waste treatment technology--not later than July 1, 1983; and

(2) For dischargers other than POTWs except as provided in 40 CFR 122.29(d), effluent limitations requiring:

(i) The best practicable control technology currently available (BPT)--

(A) For effluent limitations promulgated under Section 304(b) of the Act after January 1, 1982 and requiring a level of control substantially greater or based on fundamentally different control technology than under permits for an industrial category issued before such date, compliance as expeditiously as practicable but in no case later than three years after the date such limitations are promulgated under section 304(b) and in no case later than March 31, 1989;

- (B) For effluent limitations established on a case-by-case basis based on Best Professional Judgment (BPJ) under Section 402(a)(1)(B) of the Act in a permit issued after February 4, 1987, compliance as expeditiously as practicable but in no case later than three years after the date such limitations are established and in no case later than March 31, 1989;
 - (C) For all other BPT effluent limitations compliance is required from the date of permit issuance.
- (ii) For conventional pollutants, the best conventional pollutant control technology (BCT)--
- (A) For effluent limitations promulgated under section 304(b) of the Act, as expeditiously as practicable but in no case later than three years after the date such limitations are promulgated under section 304(b) of the Act, and in no case later than March 31, 1989.
 - (B) For effluent limitations established on a case-by-case (BPJ) basis under section 402(a)(1)(B) of the Act in a permit issued after February 4, 1987, compliance as expeditiously as practicable but in no case later than three years after the date such limitations are established and in no case later than March 31, 1989;
- (iii) For all toxic pollutants referred to in Committee Print No. 95-30, House Committee on Public Works and Transportation, the best available technology economically achievable (BAT)--
- (A) For effluent limitations established under section 304(b) of the Act, as expeditiously as practicable but in no case later than three years after the date such limitations are promulgated under section 304(b) of the Act, and in no case later than March 31, 1989.
 - (B) For permits issued on a case-by-case (BPJ) basis under section 402(a)(1)(B) of the Act after February 4, 1987 establishing BAT effluent limitations, compliance is required as expeditiously as practicable but in no case later than three years after the date such limitations are promulgated under section 304(b) of the Act, and in no case later than March 31, 1989.
- (iv) For all toxic pollutants other than those listed in Committee Print No. 95-30, effluent limitations based on BAT--
- (A) For effluent limitations promulgated under section 304(b) of the Act compliance is required as expeditiously as practicable, but in no case later than three years after the date such limitations are promulgated under section 304(b) of the Act and in no case later than March 31, 1989.
 - (B) For permits issued on a case-by-case (BPJ) basis under Section 402(a)(1)(B) of the Act after February 4, 1987 establishing BAT effluent limitations, compliance is required as expeditiously as practicable but in no case later than 3 years after the date such limitations reestablished and in no case later than March 31, 1989.
- (v) For all pollutants which are neither toxic nor conventional pollutants, effluent limitations based on BAT--

- (A) For effluent limitations promulgated under section 304(b) of the Act, compliance is required as expeditiously as practicable but in no case later than 3 years after the date such limitations are established and in no case later than March 31, 1989.
- (B) For permits issued on a case-by-case (BPJ) basis under section 402(a)(1)(B) of the Act after February 4, 1987 establishing BAT effluent limitations compliance is required as expeditiously as practicable but in no case later than three years after the date such limitations reestablished and in no case later than March 31, 1989.

(b) Statutory variances and extensions.

- (1) The following variances from technology-based treatment requirements are authorized by the Act and may be applied for under Chapter 521;
 - (i) For POTW's, a marine discharge variance under section 301(h) of the Act from secondary treatment (subpart G);
 - (ii) For dischargers other than POTW's;
 - (A) [reserved];
 - (B) [reserved]; and
 - (C) A thermal variance under section 316(a) of the Act from BPT, BCT and BAT (Section 5).

(2) [reserved]

(c) Methods of imposing technology-based treatment requirements in permits. Technology-based treatment requirements may be imposed through one of the following three methods:

- (1) Application of EPA-promulgated effluent limitations developed under section 304 of the Act to dischargers by category or subcategory. These effluent limitations are not applicable to the extent that they have been remanded or withdrawn. However, in the case of a court remand, determinations underlying effluent limitations shall be binding in permit issuance proceedings where those determinations are not required to be reexamined by a court remanding the regulations. In addition, dischargers may seek fundamentally different factors variances from these effluent limitations under Chapter 521 and Section 4 of this Chapter.
- (2) On a case-by-case basis under section 402(a)(1) of the Act, to the extent that EPA-promulgated effluent limitations are inapplicable. The permit writer shall apply the appropriate factors listed in paragraph (d) of this subsection and shall consider:
 - (i) The appropriate technology for the category or class of point sources of which the applicant is a member, based upon all available information; and
 - (ii) Any unique factors relating to the applicant.

[Comment: These factors must be considered in all cases, regardless of whether the permit is being issued by EPA or an approved State.]

- (3) Through a combination of the methods in paragraphs (d) (1) and (2) of this subsection. Where promulgated effluent limitations guidelines only apply to certain aspects of the discharger's operation, or to certain pollutants, other aspects or activities are subject to regulation on a case-by-case basis in order to carry out the provisions of the Act.

- (4) Limitations developed under paragraph (d)(2) of this subsection maybe expressed, where appropriate, in terms of toxicity (e.g., ``the LC-50 for fat head minnow of the effluent from outfall 001 shall be greater than 25%"). Provided, That is shown that the limits reflect the appropriate requirements (for example, technology-based or water-quality-based standards) of the Act.
- (d) In setting case-by-case limitations pursuant to paragraph (c) of this subsection, the permit writer must consider the following factors:
- (1) For BPT requirements:
- (i) The total cost of application of technology in relation to the effluent reduction benefits to be achieved from such application;
 - (ii) The age of equipment and facilities involved;
 - (iii) The process employed;
 - (iv) The engineering aspects of the application of various types of control techniques;
 - (v) Process changes; and
 - (vi) Non-water quality environmental impact (including energy requirements).
- (2) For BCT requirements:
- (i) The reasonableness of the relationship between the costs of attaining a reduction in effluent and the effluent reduction benefits derived;
 - (ii) The comparison of the cost and level of reduction of such pollutants from the discharge from publicly owned treatment works to the cost and level of reduction of such pollutants from a class or category of industrial sources;
 - (iii) The age of equipment and facilities involved;
 - (iv) The process employed;
 - (v) The engineering aspects of the application of various types of control techniques;
 - (vi) Process changes; and
 - (vii) Non-water quality environmental impact (including energy requirements).
- (3) For BAT requirements:
- (i) The age of equipment and facilities involved;
 - (ii) The process employed;
 - (iii) The engineering aspects of the application of various types of control techniques;
 - (iv) Process changes;
 - (v) The cost of achieving such effluent reduction; and
 - (vi) Non-water quality environmental impact (including energy requirements).
- (e) Technology-based treatment requirements are applied prior to or at the point of discharge.
- (f) Technology-based treatment requirements cannot be satisfied through the use of ``non-treatment" techniques such as flow augmentation and in-stream mechanical aerators. However, these techniques may be considered as a method of achieving water quality standards on a case-by-case basis when:

- (1) The technology-based treatment requirements applicable to the discharge are not sufficient to achieve the standards;
 - (2) The discharger agrees to waive any opportunity to request a variance under section 301 (c), (g) or (h) of the Act; and
 - (3) The discharger demonstrates that such a technique is the preferred environmental and economic method to achieve the standards after consideration of alternatives such as advanced waste treatment, recycle and reuse, land disposal, changes in operating methods, and other available methods.
- (g) Technology-based effluent limitations shall be established under this section for solids, sludges, filter backwash, and other pollutants removed in the course of treatment or control of wastewaters in the same manner as for other pollutants.
- (h)
- (1) The Department may set a permit limit for a conventional pollutant at a level more stringent than the best conventional pollution control technology (BCT), or a limit for a non conventional pollutant which shall not be subject to modification under section 301 (c) or (g) of the Act where:
 - (i) Effluent limitations guidelines specify the pollutant as an indicator for a toxic pollutant, or
 - (ii)
 - (A) The limitation reflects BAT-level control of discharges of one or more toxic pollutants which are present in the waste stream, and a specific BAT limitation upon the toxic pollutant(s) is not feasible for economic or technical reasons;
 - (B) The permit identifies which toxic pollutants are intended to be controlled by use of the limitation; and
 - (C) The fact sheet required by Chapter 522 sets forth the basis for the limitation, including a finding that compliance with the limitation will result in BAT-level control of the toxic pollutant discharges identified in paragraph (h)(1)(ii)(B) of this subsection, and a finding that it would be economically or technically infeasible to directly limit the toxic pollutant(s).
 - (2) The Department may set a permit limit for a conventional pollutant at a level more stringent than BCT when:
 - (i) Effluent limitations guidelines specify the pollutant as an indicator for a hazardous substance, or
 - (ii)
 - (A) The limitation reflects BAT-level control of discharges (or an appropriate level determined under section 301(c) or (g) of the Act) of one or more hazardous substance(s) which are present in the waste stream, and a specific BAT (or other appropriate) limitation upon the hazardous substance(s) is not feasible for economic or technical reasons;
 - (B) The permit identifies which hazardous substances are intended to be controlled by use of the limitation; and

- (C) The fact sheet required by Chapter 522 sets forth the basis for the limitation, including a finding that compliance with the limitations will result in BAT-level (or other appropriate level) control of the hazardous substances discharges identified in paragraph (h)(2)(ii)(B) of the subsection, and a finding that it would be economically or technically infeasible to directly limit the hazardous substance(s).
- (iii) Hazardous substances which are also toxic pollutants are subject to paragraph (h)(1) of this subsection.
- (3) The Department may not set a more stringent limit under the preceding paragraphs if the method of treatment required to comply with the limit differs from that which would be required if the toxic pollutant(s) or hazardous substance(s) controlled by the limit were limited directly.
- (4) Toxic pollutants identified under paragraph (h)(1) of this subsection remain subject to the requirements of Chapter 523 (notification of increased discharges of toxic pollutants above levels reported in the application form).

Section 3. Criteria for Issuance of Permits to Aquaculture Projects. [see 40 CFR 125, Subpart B]

Subsection I. Purpose and scope.

- (a) These regulations establish guidelines under sections 318 and 402 of the Act for approval of any discharge of pollutants associated with an aquaculture project.
- (b) The regulations authorize, on a selective basis, controlled discharges which would otherwise be unlawful under the Act in order to determine the feasibility of using pollutants to grow aquatic organisms which can be harvested and used beneficially. EPA policy is to encourage such projects, while at the same time protecting other beneficial uses of the waters.
- (c) Permits issued for discharges into aquaculture projects under this chapter are NPDES permits and are subject to the applicable requirements of Chapters 521, 522 and 523 and 40 CFR part 123. Any permit shall include such conditions (including monitoring and reporting requirements) as are necessary to comply with those parts. Technology-based effluent limitations need not be applied to discharges into the approved project except with respect to toxic pollutants.

Subsection II. Criteria.

- (a) No NPDES permit shall be issued to an aquaculture project unless:
 - (1) The Department determines that the aquaculture project:
 - (i) Is intended by the project operator to produce a crop which has significant direct or indirect commercial value (or is intended to be operated for research into possible production of such a crop); and
 - (ii) Does not occupy a designated project area which is larger than can be economically operated for the crop under cultivation or than is necessary for research purposes.

- (2) The applicant has demonstrated, to the satisfaction of the Department, that the use of the pollutant to be discharged to the aquaculture project will result in an increased harvest of organisms under culture over what would naturally occur in the area;
 - (3) The applicant has demonstrated, to the satisfaction of the Department, that if the species to be cultivated in the aquaculture project is not indigenous to the immediate geographical area, there will be minimal adverse effects on the flora and fauna indigenous to the area, and the total commercial value of the introduced species is at least equal to that of the displaced or affected indigenous flora and fauna;
 - (4) The Department determines that the crop will not have a significant potential for human health hazards resulting from its consumption;
 - (5) The Department determines that migration of pollutants from the designated project area to water outside of the aquaculture project will not cause or contribute to a violation of water quality standards or a violation of the applicable standards and limitations applicable to the supplier of the pollutant that would govern if the aquaculture project were itself a point source. The approval of an aquaculture project shall not result in the enlargement of a pre-existing mixing zone area beyond what had been designated by the State for the original discharge.
- (b) No permit shall be issued for any aquaculture project in conflict with a plan or an amendment to a plan approved under section 208(b) of the Act.
- (c) No permit shall be issued for any aquaculture project located in the territorial sea, the waters of the contiguous zone, or the oceans, except in conformity with guidelines issued under section 403(c) of the Act.
- (d) Designated project areas shall not include a portion of a body of water large enough to expose a substantial portion of the indigenous biota to the conditions within the designated project area. For example, the designated project area shall not include the entire width of a water course, since all organisms indigenous to that watercourse might be subjected to discharges of pollutants that would, except for the provisions of section 318 of the Act, violate section 301 of the Act.
- (e) Any modifications caused by the construction or creation of a reef, barrier or containment structure shall not unduly alter the tidal regimen of an estuary or interfere with migrations of unconfined aquatic species.
- [Comment: Any modifications described in this paragraph which result in the discharge of dredged or fill material into navigable waters may be subject to the permit requirements of section 404 of the Act.]
- (f) Any pollutants not required by or beneficial to the aquaculture crop shall not exceed applicable standards and limitations when entering the designated project area.

Section 4. Criteria and Standards for Determining Fundamentally Different Factors Under Sections 301(b)(1)(A), 301(b)(2) (A) and (E) of the Clean Water Act. [see 40 CFR 125, Subpart D]

Subsection I. Purpose and scope.

- (a) This section establishes the criteria and standards to be used in determining whether effluent limitations alternative to those required by promulgated EPA effluent limitations guidelines

under sections 301 and 304 of the Act (hereinafter referred to as "national limits") should be imposed on a discharger because factors relating to the discharger's facilities, equipment, processes or other factors related to the discharger are fundamentally different from the factors considered by EPA in development of the national limits. This section applies to all national limitations promulgated under sections 301 and 304 of the Act, except for the BPT limits contained in 40 CFR 423.12 (steam electric generating point source category).

- (b) In establishing national limits, EPA takes into account all the information it can collect, develop and solicit regarding the factors listed in sections 304(b) and 304(g) of the Act. In some cases, however, data which could affect these national limits as they apply to a particular discharge may not be available or may not be considered during their development. As a result, it may be necessary on a case-by-case basis to adjust the national limits, and make them either more or less stringent as they apply to certain dischargers within an industrial category or subcategory. This will only be done if data specific to that discharger indicates it presents factors fundamentally different from those considered by EPA in developing the limit at issue. Any interested person believing that factors relating to a discharger's facilities, equipment, processes or other facilities related to the discharger are fundamentally different from the factors considered during development of the national limits may request a fundamentally different factors variance under Chapter 521. In addition, such a variance may be proposed by the Department in the draft permit.

Subsection II. Criteria.

- (a) A request for the establishment of effluent limitations under this section (fundamentally different factors variance) shall be approved only if:
 - (1) There is an applicable national limit which is applied in the permit and specifically controls the pollutant for which alternative effluent limitations or standards have been requested; and
 - (2) Factors relating to the discharge controlled by the permit are fundamentally different from those considered by EPA in establishing the national limits; and
 - (3) The request for alternative effluent limitations or standards is made in accordance with the procedural requirements of Chapters 2 and 522.
- (b) A request for the establishment of effluent limitations less stringent than those required by national limits guidelines shall be approved only if:
 - (1) The alternative effluent limitation or standard requested is no less stringent than justified by the fundamental difference; and
 - (2) The alternative effluent limitation or standard will ensure compliance with sections 208(e) and 301(b)(1)(C) of the Act; and
 - (3) Compliance with the national limits (either by using the technologies upon which the national limits are based or by other control alternatives) would result in:
 - (i) A removal cost wholly out of proportion to the removal cost considered during development of the national limits; or
 - (ii) A non-water quality environmental impact (including energy requirements) fundamentally more adverse than the impact considered during development of the national limits.

(c) A request for alternative limits more stringent than required by national limits shall be approved only if:

- (1) The alternative effluent limitation or standard requested is no more stringent than justified by the fundamental difference; and
- (2) Compliance with the alternative effluent limitation or standard would not result in:
 - (i) A removal cost wholly out of proportion to the removal cost considered during development of the national limits; or
 - (ii) A non-water quality environmental impact (including energy requirements) fundamentally more adverse than the impact considered during development of the national limits.

(d) Factors which may be considered fundamentally different are:

- (1) The nature or quality of pollutants contained in the raw wasteload of the applicant's process wastewater;

[Comment: (1) In determining whether factors concerning the discharger are fundamentally different, EPA will consider, where relevant, the applicable development document for the national limits, associated technical and economic data collected for use in developing each respective national limit, records of legal proceedings, and written and printed documentation including records of communication, etc., relevant to the development of respective national limits which are kept on public file by EPA. (2) Waste stream(s) associated with a discharger's process wastewater which were not considered in the development of the national limits will not ordinarily be treated as fundamentally different under paragraph (a) of this subsection. Instead, national limits should be applied to the other streams, and the unique stream(s) should be subject to limitations based on section 402(a)(1) of the Act. See 40 CFR 125.2(c)(2).]

- (2) The volume of the discharger's process wastewater and effluent discharged;
- (3) Non-water quality environmental impact of control and treatment of the discharger's raw waste load;
- (4) Energy requirements of the application of control and treatment technology;
- (5) Age, size, land availability, and configuration as they relate to the discharger's equipment or facilities; processes employed; process changes; and engineering aspects of the application of control technology;
- (6) Cost of compliance with required control technology.

(e) A variance request or portion of such a request under this subsection shall not be granted on any of the following grounds:

- (1) The infeasibility of installing the required waste treatment equipment within the time the Act allows.

[Comment: Under this section a variance request may be approved if it is based on factors which relate to the discharger's ability ultimately to achieve national limits but not if it is based on factors which merely affect the discharger's ability to meet the statutory deadlines]

of sections 301 and 307 of the Act such as labor difficulties, construction schedules, or unavailability of equipment.]

- (2) The assertion that the national limits cannot be achieved with the appropriate waste treatment facilities installed, if such assertion is not based on factor(s) listed in paragraph (d) of this subsection;

[Comment: Review of the Administrator's action in promulgating national limits is available only through the judicial review procedures set forth in section 509(b) of the Act.]

- (3) The discharger's ability to pay for the required waste treatment; or
- (4) The impact of a discharge on local receiving water quality.

- (f) Nothing in this subsection shall be construed to impair the right of any State or locality under section 510 of the Act to impose more stringent limitations than those required by Federal law.

Subsection III. Method of application.

- (a) [reserved]

- (b) The burden is on the person requesting the variance to explain that:

- (1) Factor(s) listed in Subsection II of this section regarding the discharger's facility are fundamentally different from the factors EPA considered in establishing the national limits. The requester should refer to all relevant material and information, such as the published guideline regulations development document, all associated technical and economic data collected for use in developing each national limit, all records of legal proceedings, and all written and printed documentation including records of communication, etc., relevant to the regulations which are kept on public file by the EPA;
- (2) The alternative limitations requested are justified by the fundamental difference alleged in paragraph (b)(1) of this subsection; and
- (3) The appropriate requirements of Sub-section I of this section have been met.

Section 5. Criteria for Determining Alternative Effluent Limitations Under Section 316(a) of the Clean Water Act. [see 40 CFR 125, Subpart H]

Subsection I. Purpose and scope. Section 316(a) of the Act provides that:

``With respect to any point source otherwise subject to the provisions of section 301 or section 306 of this Act, whenever the owner or operator of any such source, after opportunity for public hearing, can demonstrate to the satisfaction of the Administrator (or, if appropriate, the State) that any effluent limitation proposed for the control of the thermal component of any discharge from such source will require effluent limitations more stringent than necessary to assure the projection [sic] and propagation of a balanced, indigenous population of shellfish, fish and wildlife in and on the body of water into which the discharge is to be made, the Administrator (or, if appropriate, the State) may impose an effluent limitation under such sections on such plant, with respect to the thermal component of such discharge (taking into account the interaction of such thermal component with other pollutants), that will assure the protection and propagation of a balanced indigenous population of shellfish, fish and wildlife in and on that body of water."'

This section describes the factors, criteria and standards for the establishment of alternative thermal effluent limitations under section 316(a) of the Act in permits issued under section 402(a) of the Act.

Subsection II. Definitions.

For the purpose of this section:

- (a) Alternative effluent limitations means all effluent limitations or standards of performance for the control of the thermal component of end discharge which are established under section 316(a) of the Act and this section.
- (b) Representative important species means species which are representative, in terms of their biological needs, of a balanced, indigenous community of shellfish, fish and wildlife in the body of water into which a discharge of heat is made.
- (c) The term balanced, indigenous community is synonymous with the term balanced, indigenous population in the Act and means a biotic community typically characterized by diversity, the capacity to sustain itself through cyclic seasonal changes, presence of necessary food chain species and by a lack of domination by pollution tolerant species. Such a community may include historically non-native species introduced in connection with a program of wildlife management and species whose presence or abundance results from substantial, irreversible environmental modifications. Normally, however, such a community will not include species whose presence or abundance is attributable to the introduction of pollutants that will be eliminated by compliance by all sources with section 301(b)(2) of the Act; and may not include species whose presence or abundance is attributable to alternative effluent limitations imposed pursuant to section 316(a) of the Act.

Subsection III. Early screening of applications for variances under section 316(a) of the Act.

- (a) Any initial application for a variance under section 316(a) of the Act shall include the following early screening information:
 - (1) A description of the alternative effluent limitation requested;
 - (2) A general description of the method by which the discharger proposes to demonstrate that the otherwise applicable thermal discharge effluent limitations are more stringent than necessary;
 - (3) A general description of the type of data, studies, experiments and other information which the discharger intends to submit for the demonstration; and
 - (4) Such data and information as may be available to assist the Department in selecting the appropriate representative important species.
- (b) After submitting the early screening information under paragraph (a) of this subsection, the discharger shall consult with the Department at the earliest practicable time (but not later than 30 days after the application is filed) to discuss the discharger's early screening information. Within 60 days after the application is filed, the discharger shall submit for the Department's approval a detailed plan of study which the discharger will undertake to support its demonstration under section 316(a) of the Act. The discharger shall specify the nature and extent of the following type of information to be included in the plan of study: Biological, hydrographical and meteorological

data; physical monitoring data; engineering or diffusion models; laboratory studies; representative important species; and other relevant information. In selecting representative important species, special consideration shall be given to species mentioned in applicable water quality standards. After the discharger submits its detailed plan of study, the Department shall either approve the plan or specify any necessary revisions to the plan. The discharger shall provide any additional information or studies which the Department subsequently determines necessary to support the demonstration, including such studies or inspections as may be necessary to select representative important species. The discharger may provide any additional information or studies which the discharger feels are appropriate to support the demonstration.

- (c) Any application for the renewal of a section 316(a) of the Act variance shall include only such information described in paragraphs (a) and (b) of this subsection as the Department requests within 60 days after receipt of the permit application.
- (d) The Department shall promptly notify the Secretary of Commerce and the Secretary of the Interior, and any affected State of the filing of the request and shall consider any timely recommendations they submit.
- (e) In making the demonstration the discharger shall consider any information or guidance published by EPA to assist in making such demonstrations.
- (f) If an applicant desires a ruling on an application under section 316(a) of the Act before the ruling on any other necessary permit terms and conditions, it shall so request upon filing its application under paragraph (a) of this subsection. This request shall be granted or denied at the discretion of the Department.

Note: At the expiration of the permit, any discharger holding a section 316(a) of the Act variance should be prepared to support the continuation of the variance with studies based on the discharger's actual operation experience.

Subsection IV. Criteria and standards for the determination of alternative effluent limitations under section 316(a) of the Act.

- (a) Thermal discharge effluent limitations or standards established in permits may be less stringent than those required by applicable standards and limitations if the discharger demonstrates to the satisfaction of the Department that such effluent limitations are more stringent than necessary to assure the protection and propagation of a balanced, indigenous community of shellfish, fish and wildlife in and on the body of water into which the discharge is made. This demonstration must show that the alternative effluent limitation desired by the discharger, considering the cumulative impact of its thermal discharge together with all other significant impacts on the species affected, will assure the protection and propagation of a balanced indigenous community of shellfish, fish and wildlife in and on the body of water into which the discharge is to be made.
- (b) In determining whether or not the protection and propagation of the affected species will be assured, the Department may consider any information contained or referenced in any applicable thermal water quality criteria and thermal water quality information published by the Administrator under section 304(a) of the Act, or any other information it deems relevant.
- (c)

- (1) Existing dischargers may base their demonstration upon the absence of prior appreciable harm in lieu of predictive studies. Any such demonstrations shall show:
 - (i) That no appreciable harm has resulted from the normal component of the discharge (taking into account the interaction of such thermal component with other pollutants and the additive effect of other thermal sources to a balanced, indigenous community of shellfish, fish and wildlife in and on the body of water into which the discharge has been made; or
 - (ii) That despite the occurrence of such previous harm, the desired alternative effluent limitations (or appropriate modifications thereof) will nevertheless assure the protection and propagation of a balanced, indigenous community of shellfish, fish and wildlife in and on the body of water into which the discharge is made.
- (2) In determining whether or not prior appreciable harm has occurred, the Department shall consider the length of time in which the applicant has been discharging and the nature of the discharge.

Section 6. Criteria and Standards for Best Management Practices Authorized Under Section 304(e) of the Clean Water Act. [see 40 CFR 125, Subpart K]

Subsection I. Purpose and scope. This section describes how best management practices (BMPs) for ancillary industrial activities under section 304(e) of the Act shall be reflected in permits, including best management practices promulgated in effluent limitations under section 304 and established on a case-by-case basis in permits under section 402(a)(1) of the Act. Best management practices authorized by section 304(e) of the Act are included in permits as requirements for the purposes of section 301, 302, 306, 307, or 403 of the Act, as the case may be.

Subsection II. Definition. Manufacture means to produce as an intermediate or final product, or by-product.

Subsection III. Applicability of best management practices. Dischargers who use, manufacture, store, handle or discharge any pollutant listed as toxic under section 307(a)(1) of the Act or any pollutant listed as hazardous under section 311 of the Act are subject to the requirements of this section for all activities which may result in significant amounts of those pollutants reaching waters of the State. These activities are ancillary manufacturing operations including: Materials storage areas; in-plant transfer, process and material handling areas; loading and unloading operations; plant site runoff; and sludge and waste disposal areas.

Subsection IV. Permit terms and conditions.

- (a) Best management practices shall be expressly incorporated into a permit where required by an applicable EPA promulgated effluent limitations guideline under section 304(e) of the Act;
- (b) Best management practices may be expressly incorporated into a permit on a case-by-case basis where determined necessary to carry out the provisions of the Act under section 402(a)(1) of the Act. In issuing a permit containing BMP requirements, the Department shall consider the following factors:
 - (1) Toxicity of the pollutant(s);

- (2) Quantity of the pollutant(s) used, produced, or discharged;
 - (3) History of NPDES permit violations;
 - (4) History of significant leaks or spills of toxic or hazardous pollutants;
 - (5) Potential for adverse impact on public health (e.g., proximity to a public water supply) or the environment (e.g., proximity to a sport or commercial fishery); and
 - (6) Any other factors determined to be relevant to the control of toxic or hazardous pollutants.
- (c) Best management practices may be established in permits under paragraph (b) of this subsection alone or in combination with those required under paragraph (a) of this section.
- (d) In addition to the requirements of paragraphs (a) and (b) of the subsection, dischargers covered under Subsection III of this section shall develop and implement a best management practices program in accordance with Subsection V of this section which prevents, or minimizes the potential for, the release of toxic or hazardous pollutants from ancillary activities to waters of the State.

Subsection V. Best management practices programs.

- (a) BMP programs shall be developed in accordance with good engineering practices and with the provisions of this section.
- (b) The BMP program shall:
- (1) Be documented in narrative form, and shall include any necessary plot plans, drawings or maps;
 - (2) Establish specific objectives for the control of toxic and hazardous pollutants.
 - (i) Each facility component or system shall be examined for its potential for causing a release of significant amounts of toxic or hazardous pollutants to waters of the State due to equipment failure, improper operation, natural phenomena such as rain or snowfall, etc.
 - (ii) Where experience indicates a reasonable potential for equipment failure (e.g., a tank overflow or leakage), natural condition (e.g., precipitation), or other circumstances to result in significant amounts of toxic or hazardous pollutants reaching surface waters, the program should include a prediction of the direction, rate of flow and total quantity of toxic or hazardous pollutants which could be discharged from the facility as a result of each condition or circumstance;
 - (3) Establish specific best management practices to meet the objectives identified under paragraph (b)(2) of this section, addressing each component or system capable of causing a release of significant amounts of toxic or hazardous pollutants to the waters of the State;
 - (4) The BMP program: (i) May reflect requirements for Spill Prevention Control and Countermeasure (SPCC) plans under section 311 of the Act and 40 CFR part 151, and may incorporate any part of such plans into the BMP program by reference;

[Comment: EPA has proposed section 311(j)(1)(c) regulations (43 FR 39276) which require facilities subject to NPDES to develop and implement SPCC plans to prevent discharges of reportable quantities of designated hazardous substances. While subpart K requires only procedural activities and minor construction, the proposed 40 CFR part 151 (SPCC

regulations) are more stringent and comprehensive with respect to their requirements for spill prevention. In developing BMP programs in accordance with subpart K, owners or operators should also consider the requirements of proposed 40 CFR part 151 which may address many of the same areas of the facility covered by this section.]

- (ii) Shall assure the proper management of solid and hazardous waste in accordance with regulations promulgated under the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976 (RCRA) (40 U.S.C. 6901 et seq.). Management practices required under RCRA regulations shall be expressly incorporated into the BMP program; and
- (iii) Shall address the following points for the ancillary activities in Subsection III of this section:

- (A) Statement of policy;
- (B) Spill Control Committee;
- (C) Material inventory;
- (D) Material compatibility;
- (E) Employee training;
- (F) Reporting and notification procedures;
- (G) Visual inspections;
- (H) Preventive maintenance;
- (I) Housekeeping; and
- (J) Security.

[Comment: Additional technical information on BMPs and the elements of a BMP program is contained in publication entitled "Guidance Manual for Developing Best Management Practices (BMP)." Copies may be obtained by written request to the Office of Water Resource Center (mail code: 4100), Environmental Protection Agency, Washington, DC 20460].

(c)

- (1) The BMP program must be clearly described and submitted as part of the permit application. An application which does not contain a BMP program shall be considered incomplete. Upon receipt of the application, the Department shall approve or modify the program in accordance with the requirements of this section. The BMP program as approved or modified shall be included in the draft permit (Chapter 522). The BMP program shall be subject to the applicable permit issuance requirements of Chapter 522, resulting in the incorporation of the program (including any modifications of the program resulting from the permit issuance procedures) into the final permit.
- (2) Proposed modifications to the BMP program which affect the discharger's permit obligations shall be submitted to the Department for approval. If the Department approves the proposed BMP program modification, the permit shall be modified in accordance with Chapter 522, provided that the Department may waive the requirements for public notice and opportunity for hearing on such modification if it determines that the modification is not significant. The BMP program, or modification thereof, shall be fully implemented as soon as possible but not later than one year after permit issuance, modification, or revocation and reissuance unless the Department specifies a later date in the permit.

Note: A later date may be specified in the permit, for example, to enable coordinated preparation of the BMP program required under these regulations and the SPCC plan required under 40 CFR part 151 or to allow for the completion of construction projects related to the facility's BMP or SPCC program.

- (d) The discharger shall maintain a description of the BMP program at the facility and shall make the description available to the Department upon request.
- (e) The owner or operator of a facility subject to this subpart shall amend the BMP program in accordance with the provisions of this section whenever there is a change in facility design, construction, operation, or maintenance which materially affects the facility's potential for discharge of significant amounts of hazardous or toxic pollutants into the waters of the State.
- (f) If the BMP program proves to be ineffective in achieving the general objective of preventing the release of significant amounts of toxic or hazardous pollutants to those waters and the specific objectives and requirements under paragraph (b) of this subsection, the permit and/or the BMP program shall be subject to modification to incorporate revised BMP requirements.

AUTHORITY: 38 MRSA §§ 341-D and 414-A

EFFECTIVE DATE: This rule will become effective upon the approval of the U.S. Environmental Protection Agency of related parts of the State's application to administer the National Pollutant Discharge Elimination System program of the Federal Clean Water Act, pursuant to 40 CFR part 123.